DOCUMENT RESUME

ED 188 103 CG 014 501

AUTHOR Carlozzi, Alfred F.; Ward, G. Robert
TITLE The Relationship between Dogmatism and Facilitative Interpersonal Functioning of Counselor Trainees.
PUB DATE [78]
NOTE 18p.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Affective Behavior; Counselor Characteristics; *Counselor Performance; *Counselor Training; *Dogmatism; Graduate Students; Higher Education; *Interpersonal Competence; *Personality Traits; Trainees

ABSTRACT

Numerous investigations have been conducted to discover the personality correlates of effectiveness in counseling, especially variables concerned with the counselor's ability to function flexibly and openly in both cognitive and affective dimensions. The relationship between dogmatism and facilitative interpersonal functioning was examined by controlling the effects of the counselor training program, number of graduate hours in counseling, age, sex, race, and religious affiliation variables. Subjects, 215 graduate students in guidance and counseling, completed the Opinion Scale, the Gross Rating of Facilitative Interpersonal Functioning Scale (GRFIF), and a demographic questionnaire. Multiple regression and partial correlation techniques indicated that dogmatism is inversely related to facilitative interpersonal functioning. Correlation coefficients revealed that as the number of graduate hours in counseling increased, GRFIF scores increased and dogmatism scores decreased. Results suggest that highly dogmatic counselor trainees are more likely to be interpersonally destructive or less facilitative than their low dogmatic counterparts. (Author/HLM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED188103

THE RELATIONSHIP BETWEEN DOGMATISM AND FACILITATIVE INTERPERSONAL FUNCTIONING OF COUNSELOR TRAINEES

Alfred F. Carlozzi
Oklahoma State University
and
G. Robert Ward
University of Houston

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Alfred F. Carlozzi
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 014501

Dr. Alfred F. Carlozzi
Assistant Professor, Department
of Applied Behavioral Studies
314 North Murray Hall
Oklahoma State University
Stillwater, Oklahoma 74074

Introduction

The view is held by many counselor educators that an effective counselor is a person who can communicate in a highly facilitative manner. The ability of the counselor to function at high levels of interpersonal skill has been positively related to various indices of counselor effectiveness (Mickelson & Stevic, 1971; Rogers, Gendlin, Kiesler, & Traus, 1976; Truax & Carkhuff, 1967; Traux & Mitchell, 1971; Wiggins, 1978), and as a consequence many counselor educators have exerted a considerable amount of effort to develop the interpersonal skills of their students. However, it has been argued that the personality of the counselor is more important than any set of skills, and that the effective utilization of interpersonal skills must rest on the counselor's personal qualities (Hackney, 1978; Mahon & Altmann, 1977; Resnikoff, 1972). In their review of the research on therapist interpersonal functioning and therapy outcomes, Truax and Mitchell (1971) asserted that "these techniques and procedures do not occur in pure form, but instead are grafted onto the existing qualities of the human being who serves as a change agent" (p. 299).

Numerous investigations have been conducted in order to discover the personality correlates of effectiveness in counseling. The personality variables most prevalent in the literature are concerned with the ability of the counselor to function flexibly or openly in both cognitive and affective dimensions (Allen, 1967; Passons & Dey, 1972; Whiteley, Sprinthall, Mosher, & Donaghy, 1967). Dogmatism (Rokeach, 1960) is a variable that is often cited which taps this openness characteristic (Carlozzi, Edwards, & Ward, 1978; Kemp, 1962, 1967; Mezzano, 1969; Milliken & Paterson, 1967; O'Connor & Ward, 1977; Russo, Kelz, & Hudson, 1964; Walton & Sweeney, 1969).

This study examined the relationship between dogmatism and facilitative interpersonal functioning of counselor trainees.

Dogmatism and Counselor Effectiveness

Rokeach (1960) suggests that a highly dogmatic person exhibits a closed way of thinking, a tendency to distort incoming messages and meanings, an authoritarian perspective, and an intolerant attitude toward those with dissimilar values or beliefs. One can easily contend from this suggestion that the attitudes of a highly dogmatic or closed-minded counselor would prevent him from responding at high levels of facilitative interpersonal skill with his clients, i.e., closed-mindedness or high dogmatism would be negatively associated with counselor effectiveness. Several studies have supported the hypothesis that an inverse relationship exists between dogmatism and effective counseling using various criterion measures (Carlozzi et al., 1978; Kemp, 1962; Mezzano, 1969; Milliken & Paterson, 1967; Russo et al., 1964). Though results from previous research for the most part support the contention that dogmatism and facilitative interpersonal functioning are inversely related, some studies have yielded conflicting results (Foulds, 1971; O'Connor, 1977). The question of dogmatism and effective counseling defined as facilitative interpersonal functioning has thus remained open to further scrutiny.

Hypothesis

The specific question addressed was: Is dogmatism inversely related to facilitative interpersonal functioning of counselor trainees? Age, sex, race, religious affiliation of subjects, their specific counselor training program, and their number of graduate hours in a counseling program were included as covariates to control for their potential effects upon the

relationship between the two principal variables under investigation. Thus, the research hypothesis proposed for this study was as follows: Dogmatism is inversely related to facilitative interpersonal functioning, when the effects of specific counselor training program, number of graduate hours in counseling, age, sex, race, and religious affiliation are controlled.

Subjects

The subjects for this study were 215 Master degree candidates majoring in guidance and counseling at three southwestern universities during the fall of 1978. The subjects varied in the number of graduate credit hours in guidance and counseling that they had acquired up to but not including the fall 1978 semester (from 0 to 51 graduate credit hours, with a mean of 9.7). The average age of subjects was 31.3. They were primarily female (76.7%) and Caucasian (55.8%), though a considerable proportion were Mexican-American (39.1%). Also, a considerable percentage of the total sample was Catholic (49.3%).

Instrumentation

Two instruments were utilized in this study: the Opinion Scale (Kleiber, Veldman, & Menaker, 1973), and the Gross Rating of Facilitative Interpersonal Functioning Scale (GRFIF) (Carkhuff, 1969a).

Opinion Scale

The dogmatism of the subjects was determined by the Opinion Scale, which intersperses the 40 items of Rokeach's Dogmatism Scale (Form E) with the 23 items representing the external dimension of the Internal-External Control Scale developed by Rotter (1966). This study utilized only the Dogmatism Scale.

The Dogmatism Scale was developed by Rokeach (1956) as a measure of general authoritarianism and intolerance of those with differing belief systems. The major variable measured by the scale is the relative openness-

closedness of cognitive or belief systems. The final version, Form E, consists of 40 items based on a six-point Likert rating scale. Each item is a statement of opinion. Subjects are asked to indicate their agreement or disagreement with each item on a scale ranging from +3 to -3. The 0 point is excluded in order to force agreement or disagreement with the items. A constant of 4 is added to each item score, thus yielding a final score ranging from 1 to 7. The final dogmatism score is computed by totaling the scores for the 40 dogmatism items. A higher score indicates a greater degree of dogmatism or closed-mindedness. A lower score indicates a lower degree of dogmatism or greater open-mindedness.

Rokeach (1960) reported odd-even reliability coefficients ranging from .68 to .91, and test-retest reliabilities from .71 to .93. Zagona and Zurcher (1965) reported a test-retest reliability of .70. After reviewing studies on the reliability of the Dogmatism Scale, Lake, Miles, and Earle (1973) concluded that a reasonable, moderate reliability has been established.

The construct validity of the D Scale is supported by numerous investigations (Burke, 1966; Davis, Frye, & Joure, 1975; Foulkes & Foulkes, 1965; Hunt & Miller, 1968; Insko, 1964; Jacoby, 1971; Kaplan & Singer, 1963, Kleck & Wheaton, 1967; Rokeach & Fruchter, 1956; Rosenfeld & Nauman, 1969; Zagona & Zurcher, 1964). Concurrent validity is supported by numerous studies correlating scores on the D Scale with scores on several personality scales, such as the California Psychological Inventory (Korn & Giddon, 1964; Plant et al., 1965), the Edwards Personal Preference Schedule (O'Connor & Ward, 1977; Swindell & Lieberman, 1968; Vacciano et al., 1968), and the Sixteen Personality Factor Questionaire (Vacchiano et al., 1968; Ward et al., 1978). Predictive validity is supported by Haiman and Duns' (1964) study in which observers predicted with significant accuracy the dogmatism scores of sub-

jects from their communicative behavior in a public speaking course.

Gross Rating of Facilitative Interpersonal Functioning Scale

Skill in facilitative interpersonal functioning was determined by application of the Gross Rating of Facilitative Interpersonal Functioning Scale (GRFIF) to the written responses of subjects to an audiotape recording of 16 client stimulus statements developed by Carkhuff (1969a). The GRFIF Scale provides a global measure of facilitative interpersonal skill. It was designed to be used by raters for measuring the degree to which a counselor communicates empathic understanding, respect, genuineness, self-disclosure, concreteness, confrontation, and immediacy of relationship in response to client stimuli. The scale consists of five descriptive levels of interpersonal functioning, arranged in an ascending order of facilitativeness or helpfulness. The lower levels are associated with negative client outcomes, and the higher levels are associated with positive client outcomes. GRFIF scores range from the lowest rating of 1.0 to the highest rating of 5.0, with 3.0 considered a minimally facilitative level.

Reliability coefficients for the GRFIF Scale have been calculated in many studies by correlating the ratings of two or more judges for the same counseling interviews. Inter-rater reliability ranges from .57 to .93 (Carkhuff, 1969b). Reliability of counselor responses has also been calculated using the test-retest method, with coefficients ranging from .84 to .94 (Carkhuff, 1969b). Predictive validity of the scale is supported by research which indicates that these facilitative dimensions have a significant impact upon client improvement (Carkhuff, 1969a; Carkhuff & Berenson, 1976; Mickelson & Stevic, 1971; Wiggins, 1978).

Procedures

Data for this study were collected during the first half of the fall, 1978 academic semester. The data were collected during regularly scheduled classes in the guidance and counseling programs at three universities. Collection of data began with administration of the Opinion Scale to the subjects. After the subjects completed the Opinion Scale, response sheets were distributed to subjects for collecting data on facilitative interpersonal functioning. Subjects were instructed to indicate on these response sheets their age, race, sex, religious affiliation, the name of their university, and the number of graduate hours in counseling that they had completed to date. They were then asked to read the instructions on the first page of the response sheet for responding in writing to an audio-tape containing 16 client stimulus statements developed by Carkhuff (1969a). After each client stimulus statement was played, subjects were given two minutes to write their responses. At the end of the two minute period, the next client stimulus statement was played, and another two minutes were provided for writing responses. This procedure was followed for each of the 16 client stimulus statements.

The Opinion Scale was computer scored by a pre-existing key and yielded a dogmatism score for each of the subjects. A rating procedure was employed to determine GRFIF scores. Two advanced graduate students in guidance and counseling, trained in the use of the GRFIF Scale according to procedures developed by Carkhuff (1969a), rated the written responses of subjects to each client stimulus statement. GRFIF scores were determined by computing the mean of the 16 ratings for each subject. Both initial inter-rater reliability and on-going inter-rater consistency coefficients were computed. Pearson product-moment correlations yielded

an initial inter-rater reliability coefficient of .91, and an inter-rater consistnecy coefficient of .86, indicating only a negligible drift in rater agreement.

Multiple regression and partial correlation techniques were employed to test the hypothesis. In addition, correlations were computed to examine the relationship of dogmatism and facilitative interpersonal functioning with number of graduate hours in counseling.

Results

Dogmatism scores ranged from 65 to 217, with a mean of 136.46 and a standard deviation of 28.87. GRFIF scores ranged from 1.31 to 3.38, with a mean of 2.49 and a standard deviation of .44. Pearson product-moment correlation coefficients were computed between dogmatism and GRFIF scores. The obtained correlation coefficient was -.550, which was significant at the .001 level. The square of this correlation coefficient (the coefficient of determination, .30) indicates that dogmatism accounted for approximately 30% of the variance in GRFIF scores before controlling for the effects of the covariates.

A multiple regression analysis of GRFIF scores was conducted with the covariates (religious affiliation, race, university, sex, age, and hours) entered first in the equation and dogmatism scores entered last. Results from this analysis are indicated in Table 1. The final R^2 of .5371 indicates that the covariates and dogmatism combined accounted for approximately 54% of the variance in GRFIF scores. Forty-one percent of the variance in GRFIF scores was accounted for by the covariates, with an increment of 13% contributed by dogmatism. This increment was statistically significant, F (1,195) = 53.874, $p < .001$. As an alternate way of quantifying this relationship, a partial correlation coefficient was calculated between dogmatism and GRFIF scores, controlling for the effects of age, sex, race,

Table 1

Summary Table for Multiple
Regression Analysis of GRFIF Scores

Variables	Multiple R	R^2	R^2 Change
Religious Affiliation	.3442	.1185	.1185
Race	.4332	.1876	.0691
University	.4422	.1955	.0079
Sex	.4469	.1997	.0042
Age	.4475	.2003	.0005
Hours	.6397	.4092	.2090
Dogmatism	.7329	.5371	.1279

religious affiliation, hours, and counseling program. The obtained partial correlation coefficient was -.4653, which was significant at the .001 level. The results of the multiple regression analysis and partial correlation support the hypothesis of this study.

The multiple regression analysis also revealed that number of graduate hours in counseling made a significant contribution to the prediction of GRFIF scores (See Table 1). The F value for the 21% increment contributed by hours was 69.33, df = 1, 196, $p < .001$. Further analysis of the effects of number of graduate hours in counseling seemed warranted -- specifically, its relationship with dogmatism and GRFIF scores, and its effects on the relationship between dogmatism and GRFIF scores. Pearson product-moment correlation coefficients were calculated for number of graduate hours in counseling with GRFIF and dogmatism scores. The obtained correlation coefficients were .421 for hours and GRFIF scores, and -.281 for hours and dogmatism scores.

Both coefficients were significant at the .001 level. These correlation coefficients indicate that as number of graduate hours in counseling increased, GRFIF scores increased while dogmatism scores decreased.

To examine the effects of number of graduate hours in counseling on the relationship between dogmatism and GRFIF scores, Pearson product-moment correlation coefficients were computed between dogmatism and GRFIF scores for subjects with varying numbers of graduate hours. The obtained correlation between dogmatism and GRFIF scores for subjects who were just beginning their graduate programs (hours = 0, n = 67) was -.565, $p < .001$; for subjects who had acquired from three to nine hours (n = 66), the correlation was -.531, $p < .001$; for subjects with 10 to 18 hours (n = 44), the correlation was -.417, $p < .01$; and, for those with 20 to 51 hours (n = 38), the correlation was -.459, $p < .01$. The differences between these correlation coefficients were tested for statistical significance, using the r to Z transformation and referring the test statistic to the normal probability table (Hays, 1963, p. 532). The differences were not found to be statistically significant.

Discussion

The results of this study support the contention that dogmatism is inversely related to facilitative interpersonal functioning. Interpersonal effectiveness has been shown in previous research to be essential to the counseling process and to client improvement (Carkhuff, 1969a; Carkhuff & Berenson, 1976; Mickelson & Stevic, 1971; Wiggins, 1978). This study concurs with several other studies which suggest that less dogmatic or open-minded counselors are more effective than highly dogmatic or closed-minded counselors (Carlozzi et al., 1978; Kemp, 1962; Russo et al., 1969).

These results have implications for the selection of counselor candidates. However, the inclusion of assessments of personality characteristics in the selection process remains a complex matter. As Walton and Sweeny (1969) have claimed, most counselor educators would not endorse a personality assessment procedure using scores from personality inventories to determine selection of counselor trainees. The use of personality instruments in any selection process raises ethical concerns that must be carefully considered and evaluated. Though counselor educators have an ethical responsibility to treat prospective counselors in a just and equitable manner, they also have an ethical responsibility to protect clients from potentially destructive counselor candidates.

Since the results of this study suggest that highly dogmatic counselor candidates are more likely to be interpersonally destructive or less facilitative than their low dogmatic counterparts, the inclusion of assessments of dogmatism of counselor candidates in the selection process seems warranted. This does not mean that the results of this study should be translated into requirements for admission to counselor education programs. Assessments of the dogmatism of prospective counselor trainees may be used to determine their potential for effectiveness in the counseling role. The results of these assessments may be used for advising the prospective trainee of potential obstacles to success in counseling. As Walton and Sweeney (1969) suggest, such results may also be used as part of a self-assessment procedure that equips the prospective trainee "with more information predictive of his success than the meager knowledge that he shows promise of successfully completing the academic requirements" (1969, p. 32). Such advisement and self-assessment procedures may be part of a more responsible selection process that does not reject prospective trainees strictly on the basis of personality test results.

The implications which may be derived from this study for the education and supervision of counselor candidates are clear. The results are consistent with the view that qualities intrinsic to the personalities of counselors largely account for their internalization of interpersonal skills and their counseling effectiveness. The implication of such a view is that the personal qualities underlying skills need as much or more emphasis as that given to skills in counselor training. From this perspective, lasting changes in interpersonal behavior cannot be made without altering the values, attitudes, or concepts of self and others upon which interpersonal behaviors must surely rest. In basic agreement with this viewpoint, Hackney (1978) has argued that it is more appropriate for counselor educators and supervisors to try to remove personality "blocks" to facilitative interpersonal functioning than to focus on skill acquisition alone. The results of this study suggest that closed-mindedness may constitute such a block to facilitative interpersonal functioning. Based on these results, the development of educational and supervisory strategies that have some promise in reducing the dogmatism of counselor trainees is recommended. The inclusion of intensive group experiences into the counselor education curriculum, and supervisory approaches that focus on the personal dynamics of the counselor candidate as well as on skills and client dynamics are examples of such strategies.

Though number of graduate hours in counseling did not significantly affect the relationship between the two principal variables of this study, it was found to be a powerful predictor of facilitative interpersonal functioning. Furthermore, hours in counselor training was significantly and positively related to facilitative interpersonal functioning, and significantly and negatively related to dogmatism. Since this was a cross-sectional and not a longitudinal study, what actually happened to the dogmatism and facilitative skills of counselor candidates as they

advanced in training cannot be ascertained. A longitudinal study designed to determine how these variables are influenced by advancement in graduate hours in counselor preparation programs is recommended.

It was not the purpose of this research to examine the effects of curricular differences in counselor education programs on the dogmatism and facilitative skill of trainees. As Bath and Calhoun (1977) have suggested, further research is needed to examine differences between professional programs that succeed and those that fail to improve the facilitative skills of counselor trainees. The same recommendation may be made for dogmatism. Kemp (1962) offered the conclusion that dogmatism is a relatively stable framework for perceiving, thinking, and relating, and that any change due to training is likely to be temporary and illusive. However, there is evidence to suggest that dogmatism can be affected by relatively short-term educational experiences (Matice, 1978; Mlott et al., 1976). Further research should be conducted to determine if dogmatism can be changed by counselor education programs.

References

Allen, T.W. Effectiveness of counselor trainees as a function of psychological openness. Journal of Counseling Psychology, 1967, 14, 35-40.

Bath, K.E., & Calhoun, R.O. The effects of professional counselor training on empathy: Continued cause for concern. Counselor Education and Supervision, 1977, 17, 98-106.

Burke, W.W. Social perception as a function of dogmatism. Perceptual and Motor Skills, 1966, 28, 863-868.

Carkhuff, R.R. Helping and human relations: A primer for lay and professional helpers (Vol. 1). New York: Holt, Rinehart, & Winston, 1969. (a)

Carkhuff, R.R. Helping and human relations: A primer for lay and professional helpers (Vol. 2). New York: Holt, Rinehart, & Winston, 1969. (b)

Carkhuff, R.R., & Berenson, B.G. Teaching as treatment. Amherst: Human Resources Development Press, 1975.

Carlozzi, A.F., Edwards, D.D., & Ward, G.R. Dogmatism as a correlate of ability in facilitative communication of counselor trainees. The Humanist Educator, 1978, 16, (3), 114-119.

Davis, T.B., Frye, R.L., & Joure, S. Perceptions and behaviors of dogmatic subjects in a T-group setting. Perceptual and Motor Skills, 1975, 41, 375-381.

Foulds, M.L. Dogmatism and ability to communicate facilitative conditions during counseling. Counselor Education and Supervision, 1971, 11, 110-114.

Foulkes, D. & Foulkes, S.H. Self-concept, dogmatism, and tolerance of trait inconsistency. Journal of Personality and Social Psychology, 1965, 2 (1), 104-110.

Hackney, H. The evolution of empathy. Personnel and Guidance Journal, 1978, 57, (1), 35-38.

Haiman, F.S., & Duns, D.F. Validations in communicative behavior of attitude-scale measures of dogmatism. The Journal of Social Psychology, 1964, 64, 287-297.

Hays, W.L. Statistics for psychologists. New York: Holt, Rinehart, & Winston, 1963.

Hunt, M.F., & Miller, G.R. Open- and closed-mindedness, belief-discrepant communication behavior, and tolerance for cognitive inconsistnecy. Journal of Personality and Social Psychology, 1968, 8 (1), 35-37.

Insko, C.A. Replication of one of Rokeach's D scale validation studies. Psychological Reports, 1964, 14, 925-926.

Jacoby, J. Interpersonal perceptual accuracy as a function of dogmatism. Journal of Experimental Social Psychology, 1971, 7, 221-236.

Kaplan, M.F., & Singer, E. Dogmatism and sensory alienation: An empirical investigation. Journal of Consulting Psychology, 1963, 27 (6), 486-491.

Kemp, C.G. Influence of dogmatism on the training of counselors. Journal of Counseling Psychology, 1962, 9, 155-157.

Kleck, R.E., & Wheaton, J. Dogmatism and responses to opinion-consistent and opinion-inconsistnet information. Journal of Personality and Social Psychology, 1967, 5 (2), 249-252.

Kleiber, D., Veldman, D.J., & Menaker, S.L. The multi-dimensionality of locus of control. Journal of Clinical Psychology, 1973, 29 (4), 411-416.

Korn, H.A., & Giddon, N.S. Scoring methods and construct validity of the dogmatism scale. Educational and Psychological Measurement, 1964, 24 (4), 867-874.

Lake, D.G., Miles, M.B., & Earle, R.B. Measuring human behavior. New York: Teachers College Press, 1973.

Matice, C. The effect of source, class, time, and dogmatism on attitude change in police academy recruits. Unpublished doctoral dissertation, University of Missouri-St. Louis, 1978.

Mezzano, J. A note on dogmatism and counselor effectiveness. Counselor Education and Supervision, 1969, 9, 64-65.

Mickelson, D.J., & Stevic, R.R. Differential effects of facilitative and non-facilitative behavioral counselors. Journal of Counseling Psychology, 1971, 18, 314-319.

Milliken, R.L., & Paterson, J.J. Relationships of dogmatism and prejudice to counseling effectiveness. Counselor Education and Supervision, 1967, 6. 125-129.

Mlott, S.R., Marcotte, D.B., & Lira, F.T. The efficacy of programmed instruction in the training of paraprofessionals. Journal of Clinical Psychology, 1976, 32 (2), 419-424.

O'Connor, C.A. Relationship between selected personality characteristics and counseling skill as effected by two training approaches. Unpublished doctoral dissertation, University of Houston, 1977.

O'Connor, C.A., & Ward, G.R. Correlation of high and low dogmatics and EPPS scores. The Texas Personnel and Guidance Journal, 1977, 5 (1), 53-58.

Passons, W.R., & Dey, G.R. Counselor candidate personal change and the communication of facilitative dimensions. Counselor Education and Supervision, 1972, 12 (1), 57-62.

Plant, W.T., Telford, C.W., & Thomas, J.A. Some personality differences between dogmatic and nondogmatic groups. Journal of Social Psychology, 1965, 67, 67-75.

Resnikoff, A. Critique of the Human Resource Development model from the viewpoint of rigor. The Counseling Psychologist, 1972, 3 (3), 46-61.

Rogers, C.R., Gendlin, E.T., Kiesler, D.J., & Traux, C.B. The therapeutic relationship and its impact: A study of psychotherapy with schizophrenics. Madison: University of Wisconsin Press, 1967.

Rokeach, M. The open and closed mind. New York: Basic Books, 1960.

Rokeach, M., & Fruchter, B. A factorial study of dogmatism and related concepts. Journal of Abnormal and Social Psychology, 1956, 53, 356-360.

Rosenfeld, H.M., & Nauman, D.J. Effects of dogmatism on the development of informal relationships among women. Journal of Personality, 1969, 37, 497-511.

Rotter, J.B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80 (1, Whole No. 609).

Russo, J.R., Kelz, J.W., & Hudson, G.R. Are good counselors open-minded? Counselor Education and Supervision, 1964, 3, 74-77.

Swindell, D.H., & Lieberman, L.R. Effect of sex on the correlation between the Dogmatism Scale and the Edwards Personal Preference Schedule. Psychological Reports, 1968, 23, 893-894.

Traux, C.B., & Carkhuff, R.R. New directions in clinical research. In B.G. Berenson & R.R. Carkhuff (Eds.), Sources of gain in counseling and psychotherapy: Training and practice. Chicago: Aldine, 1967.

Traux, C.B., & Mitchell, K.M. Research on certain therapist interpersonal skills in relation to process and outcome. In A.E. Bergin & S.L. Garfield (Eds.), Handbook of psychotherapy and behavior change. New York: Wiley, 1971.

Vacchiano, R.B., Strauss, P.S., & Schiffman, D.C. Personality correlates of dogmatism. Journal of Consulting and Clinical Psychology, 1968, 32, 83-85.

Walton, F., & Sweeney, T.J. Useful predictors of counseling effectiveness. Personnel and Guidance Journal, 1969, 48 (1), 32-38.

Ward, G.R., Cunningham, C.H., & Summerlin, M.L. Personality profiles and dogmatism in undergraduate teacher education students. Psychology in the Schools, 1978, 15 (1), 33-36.

Whiteley, J.M., Sprinthall, N.A., Mosher, R.L., & Donaghy, R.T. Selection and evaluation of counselor effectiveness. Journal of Counseling Psychology, 1967, 14, 226-234.

Wiggins, J.D. A comparison of counselor interview responses and helpee behavioral changes. Counselor Education and Supervision, 1978, 18, 95-99.

Zagona, S.V., & Zurcher, L.A. Participation, interaction and role behavior in groups selected from the extremes of the open-closed cognitive continuum. The Journal of Psychology, 1964, 68, 255-264.